~~To Wayne~~
File
ACT/035/002

Kennecott
Utah Copper Division
2300 West 1700 South
P. O. Box 31838
Salt Lake City, Utah 84131-0838
(801) 322-6123

Kennecott
JIM
SEP 26 1984

September 21, 1984

Mr. James W. Smith, Jr.
Administrator
Mineral Resource Development
and Reclamation Program
State of Utah Natural Resources
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Mr. Smith:

During the past two years, there has been a record amount of excess storm water in the Bingham Canyon drainage. The excess storm water has been due to higher-than-normal precipitation in the Great Basin. Management of the excess storm water from the Bingham Canyon watershed associated with Kennecott's Bingham mine has required unprecedented control measures.*

There is a definite possibility the excess precipitation experienced during the past two years will continue through the 1984-85 winter. If an uncontrolled discharge of excess storm water is to be avoided during the 1985 spring runoff, it will be necessary to implement emergency water treatment and control action during the fall of 1984. Tentative plans to handle the 1985 spring runoff are:

1. Increase the capacity of the mine water treatment facilities to prevent an overflow of untreated water from the Bingham Creek Reservoir during the winter and spring and generate 1,000 acre-feet of surge capacity in the reservoir to accommodate spring runoff.

2. Construct a 1,100 acre-foot impoundment in the Dry Fork drainage of Bingham Canyon to impound water from the spring snowmelt before the runoff contacts the disturbed mining area. The impoundment will be constructed by installing a slurry wall and a membrane liner on the back side of the Dry Fork waste dump.

3. Increase the dikes on 100 acres of old evaporation ponds to handle sludge generated from the treatment of excess mine water and provide additional capacity for treated spring runoff water.

4. Discharge the seepage collected during the winter in the new clay-lined evaporation ponds to the Jordan River in order to maintain 1,150 acre-feet of available capacity for spring runoff.

*Bingham Canyon Storm Water Management, Kennecott Utah Copper Division Mine, Utah Copper Division Environmental Engineering Department, August 1984.

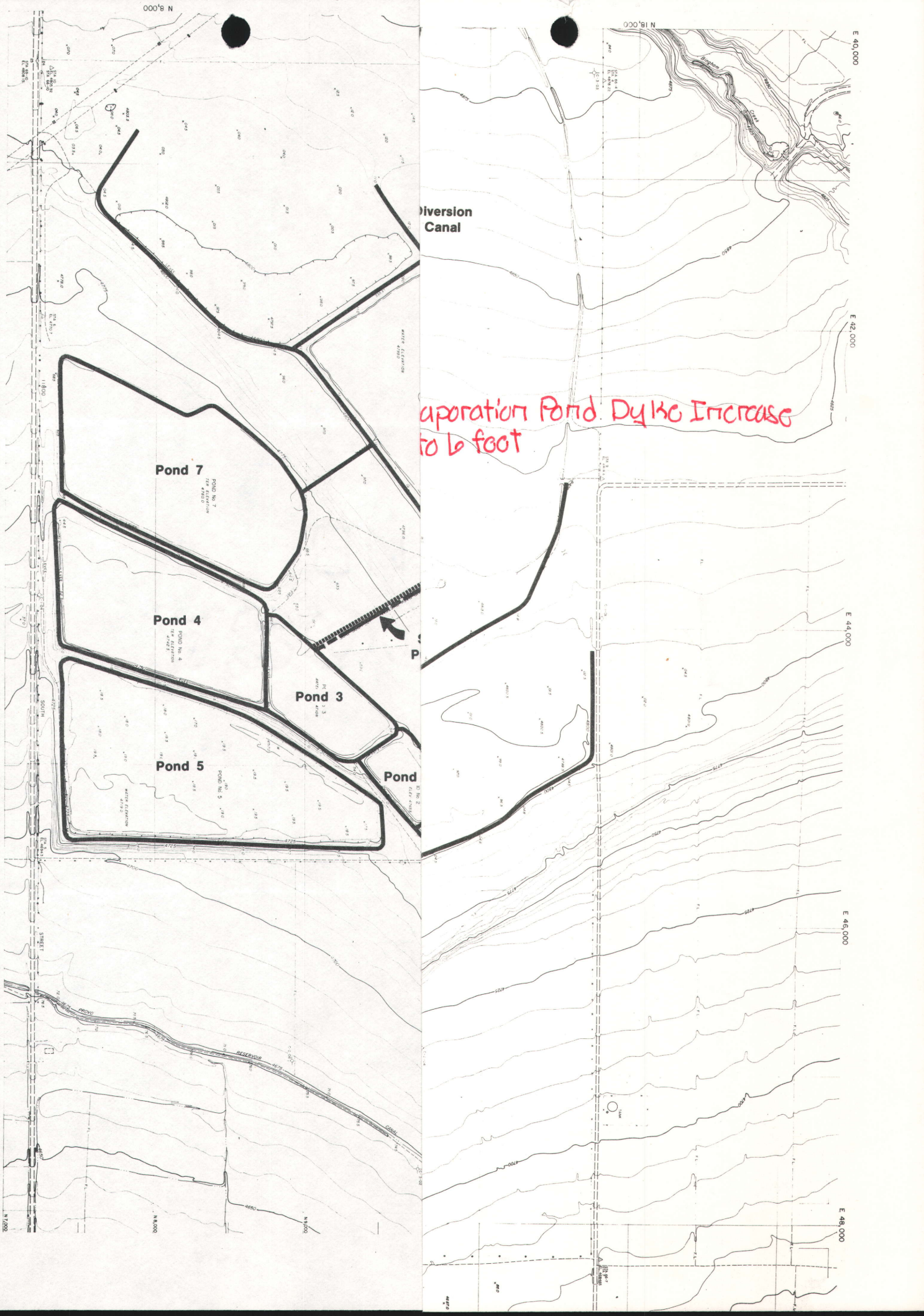
Attached are drawings showing the proposed Dry Fork impoundment and the evaporation ponds requiring dike increase. Detailed engineering design of both control measures will be forwarded when complete. Since construction will have to be concurrent with engineering design because of the limited time before heavy winter snowfall, we would appreciate your preliminary approval of these changes as soon as possible.

Yours very truly,

S. D. Taylor
Division Environmental Engineer

SDT/ac
Attachments

cc: Mr. R. K. Davey, w/o atts.
Mr. R. A. Malone, w/o atts.
Mr. C. K. Vance, w/o atts.
Mr. H. M. Wimborne, w/o atts.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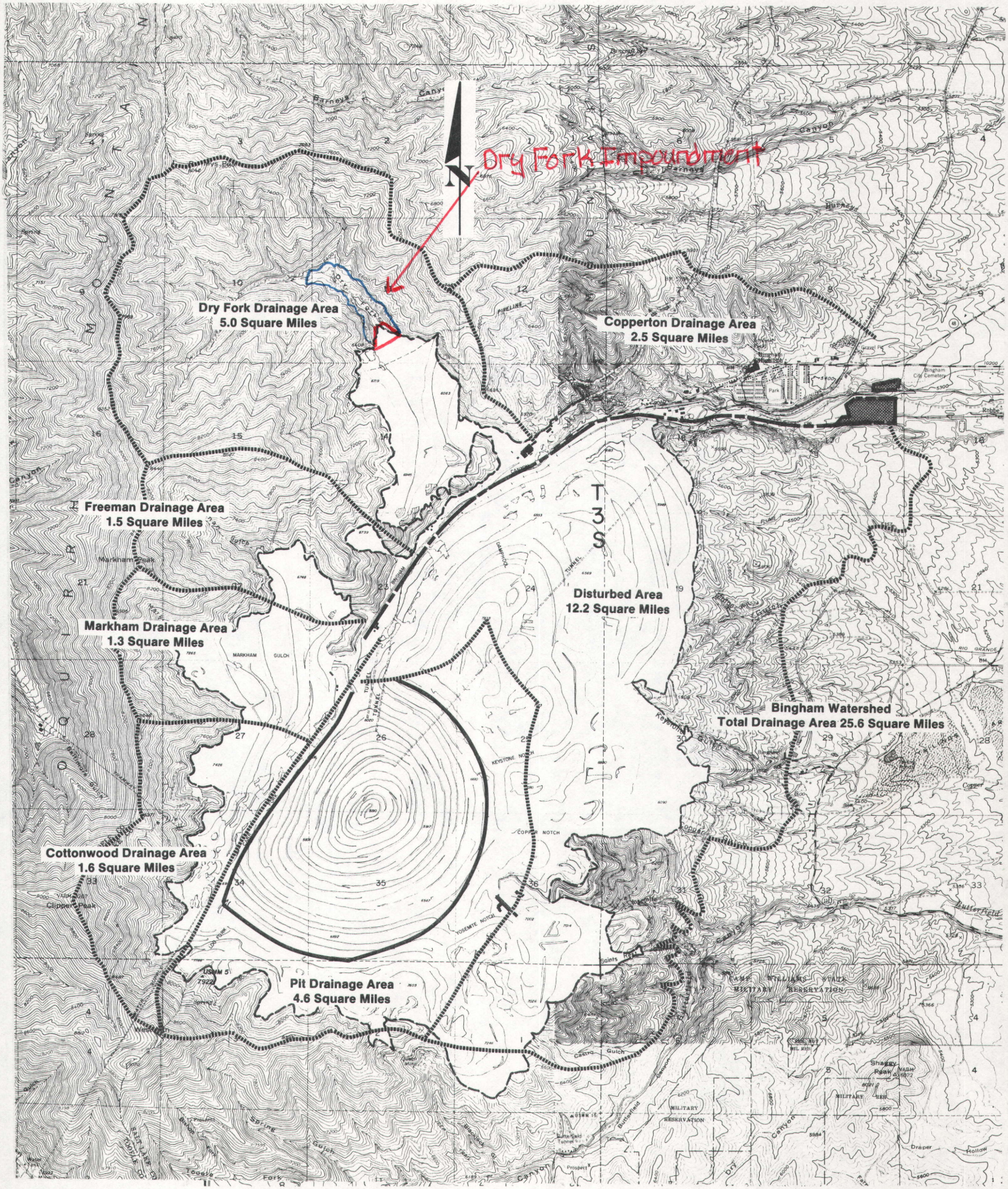
Diversion
Canal
Pond 7
Pond 4
Pond 3
Pond 5
Pond
aporation Pond. Dyke Increase
to 6 foot


Dry Fork Empoundment
Dry Fork Drainage Area
5.0 Square Miles
Copperton Drainage Area
2.5 Square Miles
Freeman Drainage Area
1.5 Square Miles
Markham Drainage Area
1.3 Square Miles
Disturbed Area
12.2 Square Miles
Bingham Watershed
Total Drainage Area 25.6 Square Miles
Cottonwood Drainage Area
1.6 Square Miles
Pit Drainage Area
4.6 Square Miles
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